LA CROSSE[®] TECHNOLOGY

Model: 308-2316 Instruction Manual DC: 122314

Professional Wireless Weather Station

La Crosse Technology[®], the world leader in atomic time and weather instruments, introduces a Professional Wireless Weather Station that provides accurate, real-time weather data straight from your backyard. This sleek weather station offers weather forecasting, indoor/outdoor temperature & humidity, wind & rain data, and precise atomic time & date—all on one comprehensive device.



able of Contents	
Features	4
Setup Instructions Step-by-Step	4
Sensor Mounting and Placement	5
Weather Station Placement	
Outdoor Reception Icon	7
Backlight	7
LCD Screen	7
Modes: Settings, Quick Display, Alarm, History and MIN/MAX	
Settings Mode: Time, Date, Temperature, Pressure, Wind, Rain Units	
Time Zone	
Daylight Saving Time Indicator ON/OFF	
12/24 Hour Time Format	ξ
Time Settings	ξ
Calendar Settings	ç
Temperature Units: Fahrenheit or Celsius	
Barometric Air Pressure Units: InHg or hPa	
Relative Air Pressure Number	
Pressure Sensitivity Settings: 2, 3, or 4	
Storm Warning Threshold: 3-9	
Wind Speed Units: mph, km/h, m/s, knots, and bft	
Rainfall Units: Inches or Millimeters	
Quick Display Mode	
Outdoor Temperature, Wind Chill or Dew Point display	
Relative or Absolute Pressure display	
Wind Speed or Wind Gust display	
Rainfall 1 hour, 24 hour, weekly, monthly, and total rain (since reset)	
Rainfall Reset	
Rain Readings	
Alarm Mode	
High Alarms:	
Low Alarms:	
Activate/Deactivate Hi and Low Alarms	14
When an alarm sounds and flashes	
History Mode	
MIN/MAX Mode	
Maximum Records with time and date stamp:	
Minimum Records with time and date stamp:	
Weather Forecast Icons	
Weather Tendency Arrows	
Pressure Sensitivity Setting	
Storm Warning Threshold	
Changing Batteries	
del: 308-2316 www.lacrossetechnology.com/support	Page 3

WWVB Radio-controlled Time Signal	18
Care and Maintenance	20
Specifications	19
Warranty Information	20
FCC Statement	21

Features

- Rainfall data (inches or millimeters): 1-hour, 24-hour, week, month and total
- Wind chill (°F or °C)
- Records min. and max. Wind chill with time and date stamp
- Wind speed (mph, m/s, km/h, knots, Beaufort)
- Weather forecast tendency arrow
- Forecast icons based on changing barometric pressure
- Barometric pressure (InHg or hPa) with 0.1hPa resolution
- Dew point (°F or °C)
- Records min. and max. dew point with time and date stamp
- Wireless outdoor and indoor humidity (% RH)
- Records min. and max. humidity with time and date stamp
- Wireless outdoor and indoor temperature (°F or °C)
- Records min. and max. temperature with time and date stamp
- 12 or 24-hour time display
- Perpetual calendar with Radio Controlled Clock (RCC)
- Time alarm
- High light LED backlight
- Wall hanging or free standing
- Synchronized instant reception
- Low power consumption (over 2 years battery life for transmitter)

Weather alarm modes for:

- Temperature
- Humidity
- Wind chill
- Dew point
- Rainfall
- Wind speed
- Air pressure
- Storm warning

Setup Instructions Step-by-Step

Batteries: We recommend using Alkaline batteries for the remote sensors and the weather station when temperatures are above 32°F (0°C). We recommend using Lithium batteries for the remote sensors when temperatures are below 32°F (0°C).

Important: Look carefully at the diagrams on page two during setup.

Step 1: Place all sensors and the weather station 5-10 feet apart.

- Step 2: Attach the Wind Cups to the wind sensor. Press on firmly. No screw required.
- **Step 3:** Connect the wind cup assembly to the top end of the shower proof casing. Align the screw holes, and fasten with long bolt and nut. Do not over tighten.

- **Step 4:** Remove the wind speed sensor/showerproof casing from the thermo-hygro sensor to reveal the two ports (for the wind sensor and rain sensor cords)
- **Step 5:** Connect the attached cables of wind and rain sensors to the correct ports of the thermo-hygro sensor. The cords should click into place. Double-check the rain and wind cords are in the correct marked port.
- **Step 6:** Insert 3 x AA, 1.5V Alkaline batteries into the back of the weather station. Observe the correct polarity.
- **Step 7:** Open the battery cover of the thermo-hygro sensor located below the two ports, and insert 2 x AA, 1.5V Alkaline batteries. Observe the correct polarity. The red LED will light up for **4 seconds**. Replace battery cover.
- Step 8: Do not press buttons or move the sensors or weather station for at least 10 minutes to avoid signal interruption.

WWVB Signal Search: The thermo-hygro sensor will transmit weather data within the first 24 seconds. Then, the sensor will start radio controlled time (WWVB) reception. During the time reception period (maximum 5 minutes), no weather data will be transmitted. The LED indicator will be blink 5 times once WWVB signal is received. Weather data will be sent again once the WWVB search finished. If the WWVB time signal is not received, the thermo-hygro sensor will search every 2 hours until received. Weather data will be transmitted when not in search mode.

Restart: If there is no outdoor temperature or wind data after 10 minutes, remove batteries from the weather station & outdoor sensor and press a button 20 times. After 15 minutes, return to **Step 1** above.

Sensor Mounting and Placement

The Wind speed/Thermohygro sensor and the Rain sensor may be mounted on a wooden pole (not included) with the U-bolts (included) or mounted on a flat surface.

Mount on a Pole:

- 1. Select a wooden pole (not included) on which to mount the sensors. The pole should not be more that 0.75 inches in diameter.
- 2. Firmly place the bottom of the thermo-hygro sensor into the plastic mounting bracket. Use a short bolt and nut to secure in place. Do not over tighten.
- 3. Check the wind and rain cord are secured to the correct ports. Slide the wind speed sensor and shower proof cover over the thermo-hygro sensor.
- 4. Attach the rain sensor to the plastic mounting bracket and secure with a long set screw. The set screw will come up through the bottom of the mounting bracket and into the rain sensor. Do not over tighten.
- Attach the rain sensor mounting bracket to the wooden pole with the included U-bolts. Do not over tighten. There are 2 different sizes of U-bolts. The smaller set for the rain mounting bracket and the larger set for the thermo-hygro/wind mounting bracket.
 Note: Attach the Rain sensor lower than the Wind/TH sensor so that rain water does not follow the cord into the port of the TH sensor.
- 6. Attach the wind speed/thermo-hygro sensor mounting bracket to the wooden pole with the included U-bolts. Do not over tighten.

Mount on a Flat Surface:

- 1. Firmly place the bottom of the thermo-hygro sensor into the plastic mounting bracket. Use a short bolt and nut to secure in place. Do not over tighten.
- 2. Check the wind and rain cord are secured to the correct ports. Slide the wind speed sensor and shower proof cover over the thermo-hygro sensor.
- 3. Place two screws through the plastic mounting bracket to secure to a flat surface. Do not over tighten.
- Place two screws through the rain gauge to secure to a flat surface. Do not over tighten the screws. Use the bubble level on the top of the rain sensor to be sure it is level.
 Note: The plastic mounting bracket is not used for the rain sensor when mounting on a flat

surface.

Placement:

- 1. Place the sensors in an open area at least 6 feet above ground.
- 2. Avoid obstructions that will block wind and rain. Allow a 50 foot clearance or more from tall buildings, trees etc. If the sensors are installed next to a tall building, the wind and rain will not be accurate.
- 3. The rain sensor will need to be cleaned periodically.
- 4. Batteries need to be changed every two years.
- 5. Mount the sensors at least 6' from any building, structure, ground, or roof top that may provide radiant heat.
- 6. Mount the sensors within range (600 feet open air) of the weather station. Each wall, window, tree etc., can cut that signal by half.

Weather Station Placement

- 1. The weather station should be mounted within range of the thermo-hygro sensor, to receive sensor signal.
- 2. Place the weather station at least six feet from radio interference such as PCs, radios or TV sets. Do not have wireless devices in the signal path between the sensors and the weather station.
- 3. The weather station has pull out stands to sit or to recline on a desk. Or the weather station may be wall mounted.
- 4. Place the weather station on a desk or count with the pull out base stand or the pull out reclining legs.
- 5. Install a mounting screw (not included) into a wall within transmission range leaving approximately 3/16 of an inch (5mm) extended from the wall.
- 6. Place the weather station onto the screw, using the hanging hole on the
- 7. backside. Gently pull the weather station down to lock the screws into place.

Note: Always ensure that the weather station locks onto the screw.

Outdoor Reception Icon

• When the outdoor sensors update, about every 48 seconds, the sensor reception icon will flash briefly.

Backlight

• When any button is pressed, the LED lights will come on for 5 seconds.

LCD Screen

- 1. Time
- 2. Alarm on indicator
- 3. Day of week/ time zone
- 4. Date
- 5. Indoor temperature display
- 6. Indoor humidity display
- 7. Indoor temperature and humidity low alarm and high alarm
- 8. Temperature display unit
- 9. General indoor alarm icon
- 10. MIN/MAX information
- 11. Wind chill and dew point
- temperature display
- 12. Outdoor temperature and humidity display
- 13. Outdoor temperature and humidity
- low alarm and high alarm
- 14. Temperature display unit
- 15. General outdoor alarm icon

- 16. Weather forecast icon
- 17.Weather tendency indicator
- 18. Pressure unit (relative or absolute)

SENSOR:

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PRESSURE

RAIN 24h

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- 19. Pressure with 24 hour history graph
- 20. Pressure low alarm and high alarm
- 21. Pressure display unit (InHg or hPa)
- 22. Pressure alarm on indicator
- 23. Wind speed display unit (m/s, km/h, knots, chill mph, bft)
- 24. Wind speed high alarm
- 25. Wind alarm on indicator
- 26. Rainfall display unit (mm/in)
- 27. Rainfall 1h, 24h,week, month or total hour display
- 28. Rainfall alarm on indicator
- 29. Radio controlled time version WWVB
- 30. Radio controlled time icon

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The numbered illustration shows the full segments of the LCD with all the possible symbols, for description purposes only.

Modes: Settings, Quick Display, Alarm, History and MIN/MAX

The weather station has 5 separate display modes that access different features of the weather station.

- Settings Mode (Set time date, units of measure)
- Quick Display Mode (Changes what is viewed on screen, Rainfall reset)
- Alarm Mode (View and set Hi or Low alarms)
- History Mode (View 24 hour history)
- MAX/MIN Mode (View MAX and MIN values with time and date stamp, reset MAX/MIN values)

Settings Mode: Time, Date, Temperature, Pressure, Wind, Rain Units.

- 1. Hold the **SET** button to enter time set mode.
- 2. Press the + or **MIN/MAX** buttons to adjust the values.
- 3. Press the **SET** button to confirm adjustments and move to the next item.

Settings order:

- 1. Time Zone Setting
- 2. Daylight Saving Indicator (DST) ON/OFF
- 3. 12/24 hour format
- 4. Hours
- 5. Minutes
- 6. Year
- 7. Month
- 8. Date
- 9. Celsius or Fahrenheit
- 10.Air pressure display units in (hPa or InHg)
- 11.Relative pressure setting (default 29.93inHg)
- 12.Pressure sensitivity setting (default 2)

Note: The lowest number is used near the coastline, the highest number is for the desert, and middle number is for everywhere else.

13.Storm warning threshold setting (default 4)

- 14.Wind speed units (km/h, mph, m/s, knots, bft)
- 15.Rainfall units (mm or inch)

Press the **HISTORY** button to exit, or wait 30 seconds without pressing buttons to return to the normal time display.

Time Zone

Setting the time zone ensures the time will be correct when the station receives the WWVB time signal.

- 1. Hold SET button and the word **ZON** will appear in the upper right corner and **-5** will flash.
- 2. Press + or MIN/MAX button to select your time zone.
- 3. Press the SET button to confirm and move to DST setting.

The DST indicator is defaulted to ON as most areas make the switch into and out of Daylight Saving Time each year.

- 4. The letters **DST** will appear in the upper right corner and **ON** will flash.
- 5. Press + or MIN/MAX button to switch DST to OFF.
- 6. Press the SET button to confirm and select 12/24 hour time format.

Zones. North American	
time z	zones are:
-4	Atlantic
-5	Eastern
-6	Central
-7	Mountain
-8	Pacific
-9	Alaskan
-10	Hawaiian

This station has 24 Time

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12/24 Hour Time Format	
 12H will flash and the letters HUR will show in the upper right corner. Press + or MIN/MAX button to select either 12 hour (AM/PM) or 24 hour time (24:00) format. Press the SET button to confirm selection and move to time settings. 	
Time Settings	
10.The hour will flash. Press + or MIN/MAX button to select the correct hour. 11.Press the SET button to confirm selection and move to the minutes. 12.The minutes will flash. Press + or MIN/MAX button to select the correct minute. 13.Press the SET button to confirm selection and move to calendar settings.	■
Calendar Settings	
 14.The year will flash. Press + or MIN/MAX button to select the correct year. Press the SET button to confirm year selection and move to the month. 15.The month will flash. Press + or MIN/MAX button to select the correct month. Press the SET button to confirm selection and move to the date. 16.The numeric date will flash. Press + or MIN/MAX button to select the correct date. Press the SET button to confirm selection and move to the date format. 17.Press the SET button to confirm selection and select Fahrenheit or Celsius temperature. 	e units.
Temperature Units: Fahrenheit or Celsius	
18.The indoor and outdoor temperature will flash together. 19.Press + or MIN/MAX button to choose Fahrenheit or Celsius temperature display. 20.Press the SET button to confirm selection and move to air pressure units.	×۲ <u>۲</u> 25, ۲ <u>۲</u> 25, ۲ ۲ ۲ ۲ ۲ ۲ ۲ ۲ ۲ ۲ ۲ ۲ ۲ ۲ ۲ ۲ ۲ ۲ ۲
Barometric Air Pressure Units: InHg or hPa	
 21.The pressure number and InHg (Inches of Mercury) will flash together. 22.Press + or MIN/MAX button if you wish to switch between InHg and hPa (Hecto Pascal) for your pressure reading. 23.Press the SET button to confirm selection and move to relative air pressure number. 	שישיט אין
Relative Air Pressure Number	
 Set the relative pressure number to a local reporting station or Internet reading for your location. 24. The relative pressure number will flash. 25. Press + or MIN/MAX button to adjust your relative pressure. 26. Press the SET button to confirm selection and move to relative air pressure sensitivity setting. 	

Pressure Sensitivity Settings: 2, 3, or 4

Pressure sensitivity settings are changed when your forecast icons do not seem to be changing properly after the weather station has been set up for a week. People who live near large bodies of water or in the desert may need to adjust this setting. Most of the time it will not need adjustment.

Note: The lowest number is used near the coastline, the highest number is for the desert, and middle number is for everywhere else.

27.The number 2, 3 or 4 (pressure sensitivity) will flash in the pressure area.
28.Press + or MIN/MAX button to select 2, 3, or 4 for a sensitivity setting.
29.Press the SET button to confirm selection and move to set the storm warning threshold.

Storm Warning Threshold: 3-9

The storm warning will alert you (flashing storm icon) if the pressure has dropped lower than the threshold set, in a three hour period.

30. The number **4** (storm warning threshold) will flash in the pressure area.

- 31.Press + or MIN/MAX button to select a threshold from 3-9 for the storm warning.
- 32.Press the SET button to confirm selection and move to set the wind speed units.

Wind Speed Units: mph, km/h, m/s, knots, and bft

33. The **wind speed** number and **unit** will flash.

34.Press + or MIN/MAX button to choose from:

- Km/h= kilometers per hour
- Mph= miles per hour
- m/s= meters per second
- knots = knots
- bft= Beaufort Scale

35.Press the **SET** button to confirm selection and move to the rainfall units.

Rainfall Units: Inches or Millimeters

36. The **rainfall** number and **unit** will flash.

37.Press + or MIN/MAX button to choose inches or millimeters.

38.Press the SET button to confirm selection and exit the setting mode.

Quick Display Mode

The Quick Display Mode allows you to quickly view different readings that share the same display area.

Outdoor Temperature, Wind Chill or Dew Point display

- 1. Press and release the SET button **once**. The Outdoor Temperature area will flash.
- 2. Press the + or MIN/MAX buttons to display:
 - Outdoor Temperature
 - Wind Chill
 - Dew Point

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Relative or Absolute Pressure display

- 3. Press and release the SET button **twice.** The Pressure Number will flash.
- 4. Press the + or MIN/MAX buttons to select Relative or Absolute Pressure.

Wind Speed or Wind Gust display

- 5. Press and release the SET button **three times.** The Wind Speed number will flash.
- 6. Press the + or MIN/MAX buttons to display Wind Speed or Wind Gust.

Rainfall 1 hour, 24 hour, weekly, monthly, and total rain (since reset)

- 7. Press and release the SET button **four times.** The Rain number will flash.
- 8. Press the + or MIN/MAX buttons to display rainfall in:
 - 1 hour
 - 24 hour
 - Week
 - Month
 - Total

Reset Current Rainfall Readings

Use the Quick Display Mode to reset all the current rainfall readings to zero (1hr, 24hr, weekly, monthly, total).

- 1. Press and release the SET button four times. The Rain number will flash.
- 2. Press the + or MIN/MAX buttons to **select Total Rain**.
- 3. Hold the SET button for 3 seconds to reset all current rain readings to 0.00.

Note: The MIN/MAX rainfall readings with time and date stamp will not be affected by the rain reset of current rainfall readings.

Rain Readings

The rain readings are running totals from current time, then back, the given time frame:

- 1 hour rainfall: rainfall over the past 1 hour
- 24 hour rainfall: rainfall over the past 24 hours
- Weekly rainfall: rainfall over the past 7 days
- Monthly rainfall: rainfall over the past 30 days
- Total rainfall: Total since the startup of weather station, until reset.

To view different rainfall readings:

- 1. Press and release the SET button **four times.** The Rain number will flash.
- 2. Press the + or MIN/MAX buttons to change the rainfall display.

Alarm Mode

The weather station has 12 HIGH Alarms and 7 LOW Alarms. Most people will not choose to set each alarm. When setting an alarm, be sure that HIGH Alarm mode or LOW Alarm mode is selected as appropriate, before proceeding.

- 1. Press the ALARM button **once** to enter HI Alarm mode (**HIAL** will show in the date display).
- 2. Press twice to enter LO Alarm mode. (LOAL will show in the date display).
- 3. Press the SET button to select an alarm value to change.
- 4. Press the + or MIN/MAX buttons to adjust the values.
- 5. After adjusting alarm values press the ALARM button to activate or deactivate individual alarms.

Note: Press the HISTORY button at any time to exit alarm settings mode.

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High Alarms

1. Press the ALARM button **once** to enter HI Alarm mode (**HIAL** will show in the date display). Press the SET button to select the **Time Alarm**. The Hour will flash.

2. Press the + or MIN/MAX buttons to adjust the hour.

3. Press the SET button to select the **minutes.** The Minutes will flash.

4. Press the + or MIN/MAX buttons to adjust the minutes.

5. Press the ALARM button to activate or deactivate the alarm.

6. Press the SET button to select the **Indoor Humidity** High Alarm.

7. Press the + or MIN/MAX buttons to adjust the humidity value.

8. Press the ALARM button to activate or deactivate the alarm.

Press the SET button to select the **Indoor Temperature** High Alarm.
 Press the + or MIN/MAX buttons to adjust the temperature value.
 Press the ALARM button to activate or deactivate the alarm.

12.Press the SET button to select the **Outdoor Humidity** High Alarm. 13.Press the + or MIN/MAX buttons to adjust the humidity value. 14.Press the ALARM button to activate or deactivate the alarm.

15.Press the SET button to select the **Outdoor Temperature** High Alarm. 16.Press the + or MIN/MAX buttons to adjust the temperature value. 17.Press the ALARM button to activate or deactivate the alarm.

18.Press the SET button to select the **Wind Chill** High Alarm.19.Press the + or MIN/MAX buttons to adjust the wind chill value.20.Press the ALARM button to activate or deactivate the alarm.

21.Press the SET button to select the **Dew Point** High Alarm.22.Press the + or MIN/MAX buttons to adjust the dew point value.23.Press the ALARM button to activate or deactivate the alarm.

24.Press the SET button to select the **Pressure** High Alarm.25.Press the + or MIN/MAX buttons to adjust the pressure value.26.Press the ALARM button to activate or deactivate the alarm.

27.Press the SET button to select the **Wind Speed** High Alarm.28.Press the + or MIN/MAX buttons to adjust the wind speed value.29.Press the ALARM button to activate or deactivate the alarm.

30.Press the SET button to select the **Wind Gust** High Alarm. 31.Press the + or MIN/MAX buttons to adjust the wind gust value. 32.Press the ALARM button to activate or deactivate the alarm.

33.Press the SET button to select the **1 Hour Rainfall** High Alarm.34.Press the + or MIN/MAX buttons to adjust the rainfall value.35.Press the ALARM button to activate or deactivate the alarm.

36.Press the SET button to select the **24 Hour Rainfall** High Alarm.37.Press the + or MIN/MAX buttons to adjust the rainfall value.38.Press the ALARM button to activate or deactivate the alarm.

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39. Press the ALARM button to exit alarm settings.

Note: There is only one time alarm. Set the time alarm in the high or low alarm setting mode.

Low Alarms:

- 1. Press the ALARM button **once** to enter HI Alarm mode (**LOAL** will show in the date display). Press the SET button to select the **Time Alarm**. The Hour will flash.
- 2. Press the + or MIN/MAX buttons to adjust the hour.
- 3. Press the SET button to select the **minutes.** The Minutes will flash.
- 4. Press the + or MIN/MAX buttons to adjust the minutes.
- 5. Press the ALARM button to activate or deactivate the alarm.
- 6. Press the SET button to select the **Indoor Humidity** Low Alarm.
- 7. Press the + or MIN/MAX buttons to adjust the humidity value.
- 8. Press the ALARM button to activate or deactivate the alarm.

9. Press the SET button to select the **Indoor Temperature** Low Alarm. 10.Press the + or MIN/MAX buttons to adjust the temperature value. 11. Press the ALARM button to activate or deactivate the alarm.

12. Press the SET button to select the **Outdoor Humidity** Low Alarm. 13.Press the + or MIN/MAX buttons to adjust the humidity value. 14. Press the ALARM button to activate or deactivate the alarm.

15. Press the SET button to select the **Outdoor Temperature** Low Alarm. 16. Press the + or MIN/MAX buttons to adjust the temperature value. 17. Press the ALARM button to activate or deactivate the alarm.

18. Press the SET button to select the **Wind Chill** Low Alarm. 19. Press the + or MIN/MAX buttons to adjust the wind chill value. 20.Press the ALARM button to activate or deactivate the alarm.

21. Press the SET button to select the **Dew Point** Low Alarm. 22.Press the + or MIN/MAX buttons to adjust the dew point value. 23. Press the ALARM button to activate or deactivate the alarm.

24.Press the SET button to select the **Pressure** Low Alarm. 25. Press the + or MIN/MAX buttons to adjust the pressure value. 26.Press the ALARM button to activate or deactivate the alarm. 27. Press the ALARM button to exit alarm settings.

Activate/Deactivate Hi and Low Alarms

- 1. Press the ALARM button to enter HI Alarm (HIAL) or LO Alarm (LOAL) mode.
- 2. Press the SET button to select an alarm value to change.
- 3. With **alarm value flashing**, press the ALARM button to activate or deactivate individual alarms.
- 4. When active (ON) the alarm icon will show.
- 5. When the alarm is inactive (OFF) the alarm icon will not show.

When an alarm sounds and flashes

- Alarm will sound for two minutes.
- Press any button to silence the alarm. •

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- The alarm will flash until the weather condition is no longer valid. The alarm will flash even when sound is silenced.
- When the alarm threshold is met, the alarm will reactivate automatically.
- Deactivate the alarm or set it to a new value to avoid repeated alarms.

History Mode

History mode allows you to view data records over the past 24 hours. These records are a snapshot of information recorded every 3 hours from setup.

- 1. Press the HISTORY button to enter history mode. The letters **HIS** will show in the date area.
- 2. Press the + button to view records over the past 24 hours at increments of -3 hours, -6 hours, -9 hours, -12 hours, -15 hours, -18 hours, -21 hours, -24 hours.
- 3. Press the HISTORY button to exit history mode.

MIN/MAX Mode

There are thirteen maximum records and seven minimum records to view with time and date of occurance. You may choose to view and/or reset any or all of these records.

- 1. Press the MIN/MAX button **once** to enter **MAX** mode.
- 2. Press the MIN/MAX button **twice** to enter **MIN** mode.
- 3. Press the + button to view individual MAX or MIN values with time and date stamp.
- 4. **RESET:** When viewing individual MAX/MIN values with time and date stamp, press the SET button to reset that record to current value date and time.
- 5. Press the HISTORY button to exit MAX or MIN mode.

View and/or Reset Maximum Records with time and date stamp

- 1. Press the MIN/MAX button **once** to enter **MAX** mode.
- 2. Press the + button to view **indoor humidity maximum** value with time and date stamp.
- 3. With the value flashing, press the SET button to reset the record to current value date and time.
- 4. Press the + button to view **indoor temperature maximum** value with time and date stamp.
- 5. With the value flashing, press the SET button to reset the record to current value date and time.

- 6. Press the + button to view **outdoor humidity maximum** value with time and date stamp.
- 7. With the value flashing, press the SET button to reset the record to current value date and time.
- 8. Press the + button to view **outdoor temperature maximum** value with time and date stamp.
- 9. With the value flashing, press the SET button to reset the record to current value date and time.
- 10.Press the + button to view **wind chill temperature maximum** value with time and date stamp.
- 11. With the value flashing, press the SET button to reset the record to current value date and time.
- 12.Press the + button to view **dew point temperature maximum** value with time and date stamp.
- 13. With the value flashing, press the SET button to reset the record to current value date and time.
- 14.Press the + button to view **pressure maximum** value with time and date stamp.
- 15. With the value flashing, press the SET button to reset the record to current value date and time.
- 16.Press the + button to view **wind speed maximum** value with time and date stamp.
- 17. With the value flashing, press the SET button to reset the record to current value date and time.
- 18.Press the + button to view **wind gust maximum** value with time and date stamp.
- 19. With the value flashing, press the SET button to reset the record to current value date and time.
- 20.Press the + button to view **1 hour rainfall maximum** value with time and date stamp.
- 21. With the value flashing, press the SET button to reset the record to current value date and time.
- 22.Press the + button to view **24 hour rainfall maximum** value with time and date stamp.
- 23. With the value flashing, press the SET button to reset the record to current value date and time.
- 24.Press the + button to view **weekly rainfall maximum** value with time and date stamp.
- 25. With the value flashing, press the SET button to reset the record to current value date and time.
- 26.Press the + button to view **monthly rainfall maximum** value with time and date stamp.
- 27. With the value flashing, press the SET button to reset the record to current value date and time.
- 28.Press the HISTORY button to exit maximum mode.

View and/or Reset Minimum Records with time and date stamp

1. Press the MIN/MAX button **twice** to enter **MIN** mode.

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- 2. Press the + button to view **indoor humidity minimum** value with time and date stamp.
- 3. With the value flashing, press the SET button to reset the record to current value date and time.
- 4. Press the + button to view **indoor temperature minimum** value with time and date stamp.
- 5. With the value flashing, press the SET button to reset the record to current value date and time.
- 6. Press the + button to view **outdoor humidity minimum** value with time and date stamp.
- 7. With the value flashing, press the SET button to reset the record to current value date and time.
- 8. Press the + button to view **outdoor temperature minimum** value with time and date stamp.
- 9. With the value flashing, press the SET button to reset the record to current value date and time.
- 10.Press the + button to view **wind chill temperature minimum** value with time and date stamp.
- 11.With the value flashing, press the SET button to reset the record to current value date and time.
- 12.Press the + button to view **dew point temperature minimum** value with time and date stamp.
- 13. With the value flashing, press the SET button to reset the record to current value date and time.
- 14.Press the + button to view **pressure minimum** value with time and date stamp.
- 15. With the value flashing, press the SET button to reset the record to current value date and time.
- 16.Press the HISTORY button to exit minimum mode.

Weather Forecast Icons

The weather station uses changing atmospheric pressure to predict weather conditions for the next 12-hours with 70-75% accuracy.

Partly Cloudy

Rainy

Weather Tendency Arrows

The weather tendency arrows are between two forecast icons and indicate which direction the pressure is trending.

Left Arrows: Pressure is falling and weather should worsen.

Right Arrows: Pressure is rising and weather should improve.

Pressure Sensitivity Setting

Pressure sensitivity settings are changed when your forecast icons do not seem to be changing properly after the weather station has been set up for a week. People who live near large bodies of water or in the desert may need to adjust this setting. Most of the time it will not need adjustment.

Note: The lowest number is used near the coastline, the highest number is for the desert, and middle number is for everywhere else.

- 1. Hold SET button to enter setting mode. The word **ZON** will appear in the upper right corner and -5 will flash.
- 2. Press the SET button 11 times to select pressure sensitivity.
- 3. The number **2**, **3**, or **4** will flash in the pressure area.
- 4. Press + or MIN/MAX button to select 2, 3, or 4 for a sensitivity setting.
- 5. Press the SET button to confirm selection and move to set the storm warning threshold. Or press the History button to exit setting mode.

Storm Warning Threshold

The Storm Warning Threshold is a low pressure warning that is set in the settings mode.

- 1. Hold SET button to enter setting mode. The word **ZON** will appear in the upper right corner and -5 will flash.
- 2. Press the SET button 12 times to select pressure sensitivity.
- 3. The number **4** will flash in the pressure area.
- 4. Press + or MIN/MAX button to select a number between 3 and 9 for a sensitivity setting.
- 5. Press the SET button to confirm selection then the History button to exit setting mode.

When the warning threshold is met over a 3 hour period, the storm warning icon will flash for 3 hours. This warning is always active so you need to set the threshold to the highest number (9) if you do not want it to flash regularly (no sound).

Changing Batteries

Sensors only: When only changing batteries in the outdoor sensor only, allow up to 3 hours for the weather station to aquire the signal again.

Weather Station & sensors: Remove batteries from the weather station & outdoor sensor and press a button 20 times. After 15 minutes, return to **Setup Instructions Step-by-Step**.

WWVB Radio-controlled Time Signal

WWVB Signal Search: The Thermo-hygro sensor receives the WWVB time signal and transmits it to the weather station. After power up, the thermo-hygro sensor will transmit weather data within the first 24 seconds. Then, the sensor will start radio controlled time (WWVB) reception.

- During the time reception period (maximum 5 minutes), no weather data will be transmitted.
- The LED indicator will be blink 5 times once WWVB signal is received.
- Weather data will be sent again once the WWVB search finished.
- If the WWVB time signal is not received, the thermo-hygro sensor will search every 2 hours until received.
- Weather data will be transmitted when not in search mode.

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The NIST radio station, WWVB, is located in Ft. Collins, Colorado and transmits the exact time signal continuously throughout the United States at 60 kHz. The signal can be received up to 2,000 miles away through the internal antenna in the atomic clock. However, due to the nature of the Earth's Ionosphere, reception is very limited during daylight hours. The atomic clock will search for a signal every night when reception is best. The WWVB radio station derives its signal from the NIST atomic clock in Boulder, Colorado. A team of atomic physicists continually measures every second of every day to an accuracy of ten billionths of a second a day. This atomic clock regulates the WWVB transmitter.

For information about WWVB visit: www.nist.gov/pml/div688/grp40/wwvb.cfm

2	
Specifications	
Indoor:	
Temperature Range:	$32^{\circ}F$ to + 140°F (0 C to 60 C) OFL outside this range
Humidity Range:	10%-99% (RH) OFL outside this range
Interval:	About every 48 seconds
Air pressure range:	300-1100hPa (8.85-32.5inHg)
Alarm interval:	120 seconds
Outdoor:	
Temperature Range:	-40°F to 149°F (-40°C to 65°C) OFL outside this range
Alkaline Batteries:	-20°F to 149°F (-28.8°C to 65°C)
Lithium Batteries:	-40°F to 149°F (-40°C to 65°C)
NOTE:	Temperatures below - 20°F (-28.8°C) require Lithium batteries in the outdoor sensor.
Humidity Range:	10%-99% (RH) OFL outside this range
Distance:	Over 600 ft. (183 meters) RF 433MHz (open air)
Interval:	About every 48 seconds
Rain volume display:	0-393.66 inches (0-9999mm) OFL outside this range
Wind speed:	0-112 mph OFL outside this range
Waterproof level:	IPX3
Power:	
Weather station	3-AA, IEC, LR6 batteries (not included)
TX231TH Thermo-hygro Sensor:	2-AA, IEC, LR6 batteries (not included)
Battery Life:	
Weather station	Battery life is over 12 months when using reputable battery brands
TX231TH	Battery life is over 24 months when using reputable battery brands
Thermo-hygro Sensor:	for both Alkaline and Lithium batteries
Dimensions:	
Weather station:	5.88″W x 6.31″H x 1.40″D
TX231TH	2 81" W x 8 02"H x 2 81"D (71 5 x 203 6 x 71 5mm)
Thermo-hygro Sensor:	
TX231W Wind Sensor:	5.67" W x 2.93"H x 6.28"D (144 x 74.5 x 159.5mm)
TX231R Rain Sensor:	2.81" W x 8.02"H x 2.81"D (150.4 x 95.1 x 60.1mm)

Care and Maintenance

- Do not mix old and new batteries
- Do not mix Alkaline, Standard, Lithium or Rechargeable Batteries
- Always purchase the correct size and grade of battery most suitable for the intended use.
- Replace all batteries of a set at the same time.
- Clean the battery contacts and also those of the device prior to battery installation.
- Ensure the batteries are installed correctly with regard to polarity (+and -).
- Remove batteries from equipment with is not to be used for an extended period of time.
- Remove used batteries promptly.
- Do not expose to extreme temperature, vibration or shock.
- Clean with a soft damp cloth. Do not use solvents or scouring agents.
- The product is not a toy. Keep it out of reach of children.
- The product is not to be used for medical purpose or for public information. It is intended for home use only.
- The specs of this product may change without prior notice.
- Improper use or unauthorized opening of housing voids warranty.
- If the product is not working properly, change the batteries.

Warranty Information

La Crosse Technology, Ltd. provides a 1-year limited time warranty (from date of purchase) on this product relating to manufacturing defects in materials & workmanship.

Before returning a product, please contact our friendly customer support with questions or visit our online help (manuals and FAQS):

Phone: 1-608-782-1610

Online Product Support: www.lacrossetechnology.com/support

Product Registration:

www.lacrossetechnology.com/support/register

View full warranty details online at:

www.lacrossetechnology.com/warranty_info.pdf

Warranty Address:

La Crosse Technology, Ltd 2830 S. 26th St. La Crosse, WI 54601

Protected under U.S. Patents:

5,978,738 | 6,076,044 |RE43903

FCC Statement

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

This device must not be co-located or operating in conjunction with any other antenna or transmitter. Operation is subject to the following two conditions:

(1) this device may not cause harmful interference, and

(2) this device must accept any interference received, including interference that may cause undesired operation.

Caution!

The manufacturer is not responsible for any radio or TV interference caused by unauthorized modifications to this equipment. Such modifications could void the user authority to operate the equipment.

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